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The Effect of Medical School Attended on the Chances of Successfully Embarking on a Clinical-Academic Career in the United Kingdom

By Callum John Donaldson[1], Miguel Sequeira Campos[2], Joanne Ridgley[1], Alexander Light[1]

1. Department of Surgery, University of Cambridge, Cambridge, UK
2. Department of Surgery, St George's University of London, London, UK

Please send all correspondence to: Callum John Donaldson, Department of Surgery, Box 202, Level 9, Addenbrooke's Hospital, Hills Road, Cambridge, CB2 0QQ (email address: callumdonaldson@doctors.org.uk)

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WHAT IS ALREADY KNOWN ON THE SUBJECT

- The academic foundation programme is the first step, after medical school, to embarking on a clinical-academic career within the formal clinical-academic pathway established in the United Kingdom.
- In the United Kingdom, medical school attended has been shown to correlate with other metrics of attainment and success in a post graduate medical career; including differing levels of success in postgraduate assessments, propensity to pursue a career in general practice and chance of experiencing fitness to practice issues in a postgraduate career.
- The effect of medical school attended on propensity to apply, and be successful, in embarking on a clinical-academic career is, however, unknown.

STUDY'S MAIN MESSAGES

- Students attending a medical school with greater academic performance and research focus are more likely to apply to the academic foundation programme.
- Students wishing to embark a clinical-academic career from any medical school have an equal chance of success.
- Therefore, due solely to an increased propensity to apply, students attending a medical school with greater academic performance and research focus are more likely to embark on a clinical-academic career.

ABSTRACT

Purpose of the Study

This study aimed to investigate whether, in the United Kingdom, medical school attended influences the propensity to apply to and be successful in obtaining an offer from the academic foundation programme (AFP), thus taking the first step to embarking on a clinical-academic career.

Study Design

A retrospective observational study was performed. Using the United Kingdom Foundation Programme's yearly statistical report data, mean application rates to, and mean offer rates from the AFP were calculated by medical school, between the years 2017-2019. Mean application and mean offer rates were subsequently correlated with metrics of medical school academic performance and research focus.

Results

Mean application rates to the AFP were higher in medical schools that had a mandatory intercalated degree as part of the undergraduate medical curriculum (mean = 33.99%, S.D = 13.93 vs mean = 19.44%, S.D = 6.88, $P < .001$), lower numerical rank in the THE 2019 World Rankings (correlation with higher numerical rank, $r = -0.50$, $P = 0.004$), and lower numerical rank in the REF 2014 United Kingdom Rankings (correlation with higher numerical rank, $r = -0.37$, $P = 0.004$). Mean offer rates from the AFP were not correlated with any metric of medical school academic performance or research focus.

Conclusions

Students attending a medical school with greater academic performance and research focus are more likely to apply and subsequently embark on a clinical-academic career. However, students wishing to embark a clinical-academic career from any medical school have an equal chance of success.

KEYWORDS

Medical school, academic foundation programme, clinical-academic career.

INTRODUCTION

In the United Kingdom, given the process of post-graduate employment within the National Health Service, advice is widely provided to prospective medical students that choice of medical school has no bearing on future career opportunities. Instead, when choosing which medical school to apply to, it is often suggested that preference of location and teaching style should take precedence.

A report produced by the UK Clinical Research Collaboration in 2005, highlighted a lack of a clear clinical-academic route as well as an availability of academic posts for medical trainees in the United Kingdom.[1] In response, and following the report's suggestions, a formal pathway for those interested in pursuing clinical academia was established. The academic foundation programme (AFP) represents the first step in this pathway.[2] It is a two-year programme which can be undertaken by competitive application on completing medical school and aims to provide dedicated time and support, in addition to that offered by the traditional foundation programme, to allow trainees to develop research, teaching and/or leadership skills.

Since the inception of the AFP, data has shown considerable variation between medical schools in the proportion of students applying for and being offered an AFP.[3–5] Furthermore, recent research has shown medical school attended to correlate with differing levels of success in postgraduate assessments, propensity to pursue a career in general practice and chance of experiencing fitness to practice issues in a postgraduate career.[6]

This paper, therefore, aims to investigate whether medical school attended influences the propensity to apply to and be successful in obtaining an offer from the AFP, thus taking the first step to embarking on a clinical-academic career.

METHODS

Academic Foundation Programme Application and Offer Rates

Data on the percentage of students per medical school applying to the academic foundation programme and of those subsequently receiving offers were available for the application cycles inclusive of 2017 – 2019.[3–5] Mean application and mean offer rates per medical school were calculated over the three-year period. Due to a split of the medical school into its constituent universities, data from Peninsula College of Medicine and Dentistry for the years 2017 and 2018 were combined with data from Plymouth University Peninsular Schools and University of Exeter for the years 2018 and 2019, to allow analyses to be completed. The first class graduated from the University of Buckingham in 2019 and, as there was therefore only one year of data was available, it was excluded from analyses.

Metrics of Medical School Performance and Research Focus

United Kingdom medical schools were categorised based on whether completion of an intercalated degree is mandatory as part of the undergraduate (A100) medical course [7–12] as well as membership of the Russell Group, a self-selected association of 24 academic institutions which produce over two thirds of "world-leading research" in the UK.[13] For medical schools with more than one constituent university, the medical school was counted as being a member of the Russell Group if any one of the constituent universities were a member. Three medical schools had more than one constituent university; Brighton and Sussex Medical School was formed as a partnership between the University of Brighton and

the University of Sussex, Hull and York Medical School was formed as a partnership between the University of Hull and the University of York, and Peninsula College of Medicine and Dentistry was formed as a partnership between the University of Plymouth and the University of Exeter.

United Kingdom medical schools were also ranked based on order of appearance in (1) the Guardian United Kingdom League Table for Medicine 2019 [14] (2) the Times Higher Education (THE) World University Rankings for Clinical, Pre-clinical and Health 2019 [15] and (3) the Research Excellence Framework (REF) assessment of United Kingdom higher education institutions' overall research output, conducted in 2014.[16,17] For medical schools with more than one constituent university, rank order was based on the constituent university with lowest numerical rank.

Statistical Analysis

Comparisons between mean medical school application and offer rates based on mandatory completion of an intercalated degree as well as membership of the Russell Group were made using two-tailed Student's t-tests. Correlation between mean medical school application and offer rates and the (1) Guardian 2019 United Kingdom League Table for Medicine (2) THE 2019 World University Ranking for Clinical, Pre-clinical and Health and (3) REF 2014 United Kingdom Overall Ranking of Institutions were evaluated using Spearman's Rho (r). Statistical significance was assumed at $p<0.05$ for all analyses.

RESULTS

Overall

For the period 2017 – 2019, the mean application rate of medical school students in the United Kingdom to the academic foundation programme was 22.3% and, for those who applied, the mean offer rate from the academic foundation programme was 48.8%. Mean application rates ranged from 8.2% at the University of Lancaster to 51.5% at the University of Oxford (Figure 1). Mean offer rates ranged from 27.3% at the University of Swansea to 69.4% at the University of Lancaster (Figure 2).

Mandatory Completion of an Intercalated Degree

Completion of an intercalated degree as part of the undergraduate medical course was mandatory at 6 of the 31 medical schools (Table 1).

Medical Schools at which an Intercalated Degree is Mandatory	**Medical Schools at which an Intercalated Degree is not Mandatory**
Imperial College London	Brighton and Sussex Medical School
King's College London	Cardiff University
The University of Edinburgh	Hull and York Medical School
University College London	Keele University
University of Cambridge	Newcastle University
University of Oxford	Norwich Medical School
	Peninsula College of Medicine and Dentistry
	Queen Mary University of London
	Queen's University Belfast

	St George's University of London
	The University of Sheffield
	The University of Warwick
	University of Aberdeen
	University of Birmingham
	University of Bristol
	University of Dundee
	University of Glasgow
	University of Lancaster
	University of Leeds
	University of Leicester
	University of Liverpool
	University of Manchester
	University of Nottingham
	University of Southampton
	University of Swansea

Table 1. A table to show medical schools at which an intercalated degree is mandatory and medical schools at which an intercalated degree is not mandatory.

Mean application rates to the academic foundation programme were significantly higher at medical schools that had a mandatory intercalated degree as part of the undergraduate medical curriculum (mean = 33.99%, S.D = 13.93) compared to medical schools that did not

(mean = 19.44%, S.D = 6.88, P < .001). Mean offer rates from the academic foundation programme were not significantly different between medical schools that had a mandatory intercalated degree as part of the undergraduate medical curriculum (mean = 49.6%, S.D = 8.8) and medical schools that did not (mean = 48.6%, S.D = 10.1, P = 0.82).

Membership of the Russell Group

23 of the 31 medical schools were members of the Russell Group (Table 2).

Medical Schools that are Members of the Russel Group	**Medical Schools that are not Members of the Russel Group**
Cardiff University	Brighton and Sussex Medical School
Hull and York Medical School	Keele University
Imperial College London	St George's University of London
King's College London	University of Aberdeen
Newcastle University	University of Dundee
Norwich Medical School	University of Lancaster
Peninsula College of Medicine and Dentistry	University of Leicester
Queen Mary University of London	University of Swansea
Queen's University Belfast	
The University of Edinburgh	
The University of Sheffield	
The University of Warwick	

University College London	
University of Birmingham	
University of Bristol	
University of Cambridge	
University of Glasgow	
University of Leeds	
University of Liverpool	
University of Manchester	
University of Nottingham	
University of Oxford	
University of Swansea	

Table 2. A table to show medical schools that are members of the Russel Group and medical schools that are not members of the Russel Group.

Mean application rates to the academic foundation programme were not significantly different between medical schools that were members of the Russell Group (mean = 23.8%, S.D = 11.0) and those that were not (mean = 17.9%, S.D = 6.1, P = 0.16). Mean offer rates from the academic foundation programme were not significantly different between medical schools that were members of the Russell Group (mean = 48.2%, S.D = 8.0) and those that were not (mean = 50.5%, S.D = 14.2, P = 0.58).

Guardian 2019 United Kingdom League Table for Medicine

No significant correlation was seen between increasing numerical medical school rank in the Guardian 2019 United Kingdom league table for medicine and mean application rates to the academic foundation programme (r = -0.10, P = 0.59). No significant correlation was seen between increasing numerical medical school rank in the Guardian 2019 United Kingdom league table for medicine and mean offer rates from the academic foundation programme (r = -0.05, P = 0.77).

THE 2019 World University Ranking for Clinical, Pre-clinical and Health

Increasing numerical medical school rank in the THE 2019 world university ranking for clinical, pre-clinical and health showed statistically-significant moderate negative correlation with mean application rates to the academic foundation programme (r = -0.50, P = 0.004) (Figure 3). No significant correlation was seen between increasing numerical medical school rank in the THE 2019 world university ranking for clinical, pre-clinical and health and mean offer rates from the academic foundation programme (r = 0.06, P = 0.74).

REF 2014 United Kingdom Overall Ranking of Institutions

Increasing numerical medical school rank in the REF 2014 United Kingdom overall ranking of institutions showed statistically-significant moderate negative correlation with mean application rates to the academic foundation programme (r = -0.37, P = 0.004) (Figure 4). No significant correlation was seen between increasing numerical medical school rank in the REF 2014 United Kingdom overall ranking of institutions and mean offer rates from the academic foundation programme (r = 0.05, P = 0.81).

DISCUSSION

Summary of Results

Mean application rates to the academic foundation programme were higher in medical schools that had a mandatory intercalated degree as part of the undergraduate medical curriculum, were ranked higher in the THE World Rankings, and were ranked higher in the REF United Kingdom Rankings. Mean offer rates from the academic foundation programme were not correlated with any metric of medical school performance or research focus.

Interpretation of Results and Impact

Contrary to widely provided advice to prospective medical students that choice of medical school has no bearing on future career opportunities, our results suggest that students attending universities with greater academic performance and research focus are more likely to apply to the AFP.

The metrics which were positively correlated with mean application rates to the AFP; mandatory completion of an intercalated degree, higher THE world ranking and higher REF United Kingdom ranking, are all likely to reflect increased availability and opportunity for students to engage with research at their respective medical schools. As part of an intercalated degree the majority of students will be required to undertake a research project and for many this will represent their primary interaction with the research environment during medical school.[7–12] Within the REF United Kingdom ranking, institutions are assessed based on the quantity and quality of their research profile whilst the same assessment features heavily in the THE world rankings.[15–17] Meanwhile, the metrics not correlated with mean application rates to the academic foundation programme: membership of the Russell group and Guardian United Kingdom ranking, place less emphasis on an institutions research profile and instead give greater weighting to other factors, such as student satisfaction.[13,14] Thus, availability and opportunity for students to engage with

research at the medical school they attend would appear to be a key factor in influencing their propensity to apply to the AFP.

It is also possible that students with an inclination to pursue a clinical-academic career are more likely to attend a medical school with greater availability and opportunity to engage with research in the first place, subsequently resulting in higher mean application rates to the AFP from these institutions. However, given most prospective medical students apply to medical school at age seventeen, few are likely to have significant previous research experience and to have developed a formed interest in pursuing a clinical-academic career at this early stage. This, therefore, seems a less probable explanation.

In support of widely provided advice to prospective medical students that choice of medical school has no bearing on future career opportunities, however, our results suggest that students applying to the AFP from any medical school have an equal chance of success in receiving an offer.

This is likely to highlight that students motivated to apply to the AFP are able to find opportunities to partake in research, teaching and leadership activities at any medical school in the United Kingdom. This being necessary to allow them to obtain the experience, publications, presentations and awards needed to score highly in the AFP application process.

It may though also reflect an inherent limitation in the way that AFP applications are scored. Units of application within the AFP are responsible for scoring the applications they receive. Most units of application take into consideration a student's academic ranking within their medical school class, whilst some apply strict exclusion cut offs based on this measure.[18]

As a result, regardless of the overall ability of a class from any given medical school, it is unlikely that an unusually high proportion from a single medical school class could ever be successful in obtaining an offer from the AFP.

It is, therefore, possible that overall equal success rates in receiving an offer from the AFP may result from a smaller, and potentially more motivated, group of candidates applying from institutions with lower application rates. This compares to institutions with higher application rates to the AFP, where applicants may represent a more generalised cross section of the student body and encounter unavoidable disadvantage due to methods utilised in AFP application scoring. This may also explain why no significant correlation was seen between mandatory completion of an intercalated BSc and success rate in receiving an offer from the AFP. Institutions at which completion of a BSc was mandatory typically have higher application rates and therefore, a large number of students with an intercalated BSc would have inevitably been disadvantaged by the score given for their decile ranking. This may offset the additional points scored for completion of a BSc.

Place in the Literature – Other factors Correlated with Chance of Applying to and Likelihood of Receiving an Offer from the AFP

Other factors, outside of the propensity of a medical school for academic performance and research focus are likely to influence application to the AFP and subsequent success in receiving an offer.

Further determinants at medical school level may include the emphasis and awareness of the AFP given to prospective applicants. There remains variation amongst medical schools in the emphasis they put on application to the AFP and subsequent support for its students.[19]

Interview preparation courses, and mock interviews are common ways to prepare students for AFP interviews. Engagement with courses has been shown to increase confidence and knowledge of the application process, and potentially enhance performance at interview.[20]

Furthermore, applicants from medical schools where the AFP is promoted may be more likely to apply, simply to have another opportunity to secure a foundation post in their preferred area without being reliant on their situational judgement test score.[18,19,21] This may be particularly true to areas where there are no ‘white space’ application questions, such as London, thus making the application process relatively simple and less time consuming.[22]

Whilst most AFP posts are research-based, there remain a significant number in medical education and leadership, which may attract a different cohort of applicants. Consequently, a university’s research rankings and academic performance, may have less of a bearing on whether their students apply for these non-research posts. Factors which may affect numbers of applicants may include peer-to-peer learning, established teaching schemes and leadership programmes within each medical school.

Gender may play a role in likelihood of application to AFP. Historically, females have been consistently underrepresented in academic medicine. In 2013, males gained 54% of AFP posts despite making up roughly 47% of foundation year one doctors.[23] Under-representation of females has been accounted to reduced interest, financial considerations and work life balance concerns.[24]

Place in the literature – Other Factors of a Postgraduate Career Correlated with Medical School Attended

Other factors of a post graduate medical career have previously been correlated with medical school attended and highlight the differences that exist between institutions.

Attendance at particular United Kingdom medical schools has been shown to be correlated with significantly above average performance in post-graduate medical examinations, namely the MCRP(UK) examinations.[25] Interestingly, the medical schools correlated with above average performance differed between the written and practical parts of the examination.[25] Inversely, medical schools teaching via problem based learning, teaching larger cohorts of students and producing more general practitioners have been correlated with poorer performance in post-graduate examinations.[6]

In the United States certain medical schools have been found to have "outlier status," consistently producing graduates who had a higher likelihood of being sued for malpractice.[26] In the United Kingdom, similar findings have been replicated with attendees of medical schools producing more male graduates and more general practitioners found more likely to encounter fitness to practice issues.[6] Medical school curriculum has also been shown to influence choice of post-graduate specialisation in the United Kingdom with medical schools teaching more general practice having more graduates entering general practice training.[6]

Limitations

This study is limited in that, as a retrospective database study, no firm conclusions can be made in regard to causality of differing application rates to and offer rates from the AFP. In

addition, data regarding the proportion of students applying to and receiving an offer from the AFP was only available for the last three application cycles. It is also important to note that whilst the AFP forms the first step in a formalised clinical-academic pathway it is possible to pursue a clinical-academic career without completing the AFP.

Despite this, the study was sufficiently powered to show significant correlation of a number of medical school metrics with application rates to the AFP, which will represent the first step in a clinical-academic career for most that are inclined to pursue this path. This provides pertinent information to prospective medical school applicants as well as those involved in the design of medical school curricula and raises several interesting hypotheses as to the differing rates seen between medical schools.

CONCLUSION

Students attending a medical school with greater academic performance and research focus are more likely to apply and subsequently embark on a clinical-academic career. However, students wishing to embark a clinical-academic career from any medical school have an equal chance of success. These findings are highly relevant to prospective medical school applicants and to medical schools seeking to promote clinical-academic careers amongst their students.

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COMPETING INTERESTS

The authors have no competing interests to declare.

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CONTRIBUTORSHIP STATEMENT

The initial idea and methodology for the study was conceived by CD. This was further refined by MSC, JR and AL. Data was compiled by CD. Data analysis was completed by CD and AL. The manuscript was drafted and revised by CD, MSC, JR and AL. CD, MSC, JR and AL approved of the final version of the manuscript and agree to be accountable for the accuracy and integrity of the work.

REFERENCES

1 Walport M. Medically-and dentally-qualified academic staff: Recommendations for training the researchers and educators of the future . 2005. www.ukcrc.org (accessed 13 Jul 2020).

2 Carney S. Rough Guide to the Academic Foundation Programme. 2013. www.foundationprogramme.nhs.uk. (accessed 13 Jul 2020).

3 UK Foundation Programme. 2017 Recruitment Stats and Facts Report. 2017. https://www.foundationprogramme.nhs.uk/wp-content/uploads/sites/2/2019/11/Stats-and-Facts-FP-2017_0.pdf (accessed 22 Jun 2020).

4 UK Foundation Programme. 2018 Recruitment Stats and Facts Report. 2018.https://www.foundationprogramme.nhs.uk/wp-content/uploads/sites/2/2019/11/Stats-and-Facts-FP-2018.pdf (accessed 22 Jun 2020).

5 UK Foundation Programme. 2019 Recruitment Stats and Facts Report. 2019.https://www.foundationprogramme.nhs.uk/wp-content/uploads/sites/2/2019/11/2019-Recruitment-Stats-and-Facts-Report.pdf (accessed 22 Jun 2020).

6 McManus IC, Harborne AC, Horsfall HL, *et al.* Exploring UK medical school differences: The MedDifs study of selection, teaching, student and F1 perceptions, postgraduate outcomes and fitness to practise. *BMC Med* 2020;**18**. doi:10.1186/s12916-020-01572-3

7 University of Oxford. Medicine. https://www.ox.ac.uk/admissions/undergraduate/courses-listing/medicine?wssl=1 (accessed 21 Jun 2020).

8 University of Cambridge. Medicine. https://www.undergraduate.study.cam.ac.uk/courses/medicine (accessed 21 Jun 2020).

9 Imperial College London. Medicine (MBBS) programmes. https://www.imperial.ac.uk/medicine/study/undergraduate/medicine-mbbs-programmes/ (accessed 21 Jun 2020).

10 University College London. MBBS Programme. https://www.ucl.ac.uk/medical-school/study/undergraduate/mbbs-programme (accessed 21 Jun 2020).

11 King's College London. Medicine. https://www.kcl.ac.uk/study/undergraduate/courses/medicine-mbbs (accessed 21 Jun 2020).

12 The University of Edinburgh. MBChB Medicine (6-year programme). https://www.ed.ac.uk/studying/undergraduate/degrees/index.php?action=view&code=A100 (accessed 21 Jun 2020).

13 Russell Group. Our universities. https://russellgroup.ac.uk/about/our-universities/ (accessed 21 Jun 2020).

14 The Guardian. University guide 2019: league table for medicine. https://www.theguardian.com/education/ng-interactive/2018/may/29/university-guide-2019-league-table-for-medicine (accessed 22 Jun 2020).

15 Times Higher Education. World University Rankings 2019 by subject: clinical, pre-clinical and health. https://www.timeshighereducation.com/world-university-rankings/2019/subject-ranking/clinical-pre-clinical-health#!/page/0/length/25/subjects/3141/sort_by/rank/sort_order/asc/cols/stats (accessed 19 Apr 2019).

16 Higher Education Funding Council for England. Research Excellence Framework 2014: The Results. 2014. https://www.ref.ac.uk/2014/media/ref/content/pub/REF 01 2014 - full document.pdf (accessed 22 Jun 2020).

17 Times Higher Education. Research Excellence Framework 2014: Overall Ranking of Institutions. https://www.timeshighereducation.com/sites/default/files/Attachments/2014/12/17/k/a/s/over-14-01.pdf (accessed 22 Jun 2020).
18 UK Foundation Programme. UKFP 2019 Applicants' Hanbook. 2018.https://heeyh-deanery-live.azurewebsites.net/sites/default/files/ukfp_2019_applicants_handbook_-_final_0.pdf (accessed 10 Aug 2020).
19 Borrelli MR, Farwana R, Gundogan B, *et al.* How to apply for the academic foundation programme. *Ann Med Surg* 2018;**29**:5–9. doi:10.1016/j.amsu.2018.01.008
20 Khajuria A, Cheng K, Levy J. Effect of a national focused course on academic medicine for UK candidates applying for a clinical academic programme. *J R Coll Physicians Edinb* 2017;**47**:65–9. doi:10.4997/JrcPe.2017.115
21 Grant M, Atalla N, Maxwell AP. So you want to be an Academic foundation programme doctor? Ulster Med. J. 2017;**86**:215–7.http://careers.bmj.com/ (accessed 6 Sep 2020).
22 UK Foundation Programme. Academic Foundation Programme (AUoA) 2021 Application Supplementary Information. https://healtheducationengland.sharepoint.com/UKFPO/Website Documentation/Forms/AllItems.aspx?id=%2FUKFPO%2FWebsite Documentation%2F3 - Programmes%2F2 Year Foundation Programme%2FAcademic Foundation Programme %28AFP%29%2FAFP 2021 White Space Questions-Master.pdf&parent=%2FUKFPO%2FWebsite Documentation%2F3 - Programmes%2F2 Year Foundation Programme%2FAcademic Foundation Programme %28AFP%29&p=true&originalPath=aHR0cHM6Ly9oZWFsdGhlZHVjYXRpb25lbmdsYW5kLnNoYXJlcG9pbnQuY29tLzpiOi9nL1VLRlBPL0VkMkdyVkVYTTQ1UHBMRmZnQjFTZnpvQkUyVWlJZGM0eWdKc3A5OUE2QkZ5eVE_cnRpbWU9S3JZTlhGbFMyRWc (accessed 6 Sep 2020).
23 General Medical Council. Our data on medical students and doctors in training in the UK. 2017. https://www.gmc-uk.org/static/documents/content/SoMEP_2017_chapter_2.pdf (accessed 6 Sep 2020).
24 Edmunds LD, Ovseiko P V., Shepperd S, *et al.* Why do women choose or reject careers in academic medicine? A narrative review of empirical evidence. Lancet. 2016;**388**:2948–58. doi:10.1016/S0140-6736(15)01091-0
25 McManus IC, Elder AT, de Champlain A, *et al.* Graduates of different UK medical schools show substantial differences in performance on MRCP(UK) Part 1, Part 2 and PACES examinations. *BMC Med* 2008;**6**:5. doi:10.1186/1741-7015-6-5
26 Waters TM, Lefevre F V., Budetti PP. Medical school attended as a predictor of medical malpractice claims. *Qual Saf Heal Care* 2003;**12**:330–6. doi:10.1136/qhc.12.5.330

FIGURE LEGENDS

Figure 1. A bar chart to show mean application rates to the academic foundation programme (AFP) between the years 2017 - 2019 by medical school.

Figure 2. A bar chart to show mean offer rates from the academic foundation programme (AFP) between the years 2017 - 2019 by medical school.

Figure 3. A scatter graph with trendline to show the correlation between medical school numerical ranking in the Times Higher Education (THE) 2019 World University Ranking for Clinical, Pre-clinical and Health and mean application rate to the academic foundation programme (AFP) between the years 2017 – 2019. Spearman's Rho (r = -0.50, P = 0.004).

Figure 4. A scatter with trendline to show the correlation between medical school numerical ranking in the Research Excellence Framework (REF) 2014 United Kingdom overall ranking of institutions and mean application rate to the academic foundation programme (AFP) between the years 2017 – 2019. Spearman's Rho (r = -0.37, P = 0.004).